

REPORT
OF THE
COMMISSIONER OF EDUCATION
FOR
THE YEAR ENDED JUNE 30, 1922



THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL.D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 1, 1922.

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1922, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

GENERAL ACTIVITIES OF THE BUREAU.

ORGANIZATION AND FUNCTIONS.

The act creating the United States Bureau of Education defines its purposes and duties as those of collecting such statistics and facts as will show the condition and progress of education in the several States and Territories and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country.

This statement of the functions of the bureau makes it primarily an institution for scientific research and gives it no administrative duties. Such administrative duties as it has have been subsequently assigned to it. Broadly stated, then, the functions of the bureau are as follows:

- (1) To be informed on all subjects pertaining to education.
- (2) To disseminate such information.
- (3) To promote the cause of education generally.

In my last report I outlined the form of organization of the bureau for the discharge of these functions. This organization, based on a careful analysis of the activities carried on, provides for two departments, with divisions as follows:

(1) Technical activities, under the direction of the assistant to the commissioner: (a) Higher education; (b) rural schools; (c) city schools; (d) service, comprising school hygiene and physical education, industrial education, home economics, commercial education, educational legislation, and foreign education.

(2) General service activities, under the direction of the chief clerk: (a) Editorial; (b) library; (c) statistics; (d) education, medical relief, and reindeer service for natives of Alaska; (e) stenographic; (f) mails and files; (g) messenger service.

The plan of organization has been effective even beyond expectations. The correlation of effort in the bureau under a unified plan has worked well in each of the divisions established and has, in my opinion, significantly increased the general efficiency of the bureau as a whole. The plan of bringing the various divisions together from time to time in conference, and particularly the technical staff, has

been especially helpful and has brought about a better understanding of the mutual efforts of those working in the bureau, and a consequent increase in morale which has been evident to me, particularly during the last few months.

The importance of the work in school hygiene and physical education has justified the employment of an additional specialist and an additional clerk. Because of this increase in personnel and the resultant extension of activities in this field, I have determined to take this work out of the Service Division and create a new division of physical education and school hygiene at the beginning of the new fiscal year.

During the past few months I have deemed it expedient, for administrative reasons, to place the work in statistics temporarily under the supervision of the chief of the city schools division.

The year's experience has not developed any suggestion for further modification of the administrative organization, and it will therefore continue for the present substantially as it was originally set up.

TECHNICAL ACTIVITIES.

EDUCATIONAL RESEARCH AND PROMOTION.

The specialists attached to the four research divisions of the bureau constituting the technical staff have held a number of conferences with the commissioner during the year for the purpose of discussing bureau plans and policies and methods of making our service to the country more effective. Conceiving the bureau as primarily an agency for service to educators and the general public, we have endeavored to function specifically in the following ways: (1) Field service, (2) research and investigation of special educational problems, (3) dissemination of information, and (4) educational surveys.

(1) SERVICE IN THE FIELD.

The bureau has always been seriously handicapped in its efforts to render field service in stimulating and promoting the cause of education by lack of funds for travel. State departments of education, county and city educational authorities, and educational institutions and associations of all kinds appeal to the bureau for guidance and assistance of a type which they maintain can be rendered only by a Federal agency. The limitations upon the ability of the bureau to send its representatives away from Washington have compelled the adoption of a policy of rendering service where there is the ability to pay the incidental cost of travel rather than in those sections or communities where the greatest need exists.

Service rendered in the field by representatives of the bureau takes the following forms: Lectures and addresses upon educational topics before audiences of teachers, students, women's clubs, business men's clubs, and the like; conducting and assisting in special conferences for the consideration of educational problems; attendance upon educational conventions; visiting schools and conferring with school officers and teachers for the purpose of securing information; participation in educational surveys (referred to hereafter).

Some of this field work is undertaken upon the initiative of the bureau, in order to secure needed information and in order to keep

abreast of current developments. Most of it, however, is done at the request of the school authorities in the several States. Summarizing all types of field service together, I may report that during the fiscal year 26 members of the bureau staff, exclusive of the Commissioner, rendered an aggregate of 1,090 days of field service outside of the District of Columbia in 41 different States; in addition, 23 days in visiting schools in Europe, 32 days in Hawaii, and one day in Canada. (Vide fig. 1.)

As one feature of this service, 18 members of the staff, exclusive of the Commissioner, delivered 257 public addresses, in 34 different States, to audiences aggregating 70,000 persons.

(2) RESEARCH AND INVESTIGATION.

In its endeavor to discharge the function of a clearing house of information the bureau is at all times engaged upon the systematic study of a variety of current problems. The staff of the bureau available for technical study of this kind is so limited that it is impossible to give serious attention to more than a fraction of the perplexing questions upon which school authorities seek advice. The daily correspondence of the bureau makes heavy demands upon the time of those whom we should be permitted to assign to continuous research. Further inroads on the available time of members of the technical staff are due to assignments to educational survey work in the field.

In view of these handicaps, we call attention with some pride to the extent and variety of the research work accomplished during the year. The types of study upon which the bureau has been engaged are best suggested by the titles of the publications issued, as given in the following paragraphs, and in the report of the editorial division, pages 20-24.

(3) DISSEMINATION OF INFORMATION.

For many years the chief contribution of the bureau, in the way of publications, was the commissioner's annual report. Beginning about 1906 the policy was adopted of publishing a series of bulletins or monographs on various phases of education. The manuscripts of many of these were contributed by educators outside the bureau, but as the membership of the staff increased in number these publications have represented the work of the bureau in increasing proportions.

I find that many of these monographs, contributed by bureau specialists and by others, have been important contributions to the literature of education, and have exerted measurable influence on the development of school practice. This influence has never been as great as it might, because of certain practical limitations in the matter of printing and distribution.

Although there are upwards of 800,000 school-teachers and officers in the United States, the bureau is limited by law to editions of 12,500 copies of its bulletins. Salaries paid to school-teachers do not encourage investment in books and other needed helps; consequently the larger and more expensive bulletins reach only a relatively small number among the teachers.

For this reason, and also because of the limited amount of funds available for printing and the delays incident to getting the larger

manuscripts through the Government Printing Office, the bureau has in recent years reduced the number of more extensive treatises, and materially increased the number and proportion of briefer papers. These now take the form of circulars or leaflets of from 8 to

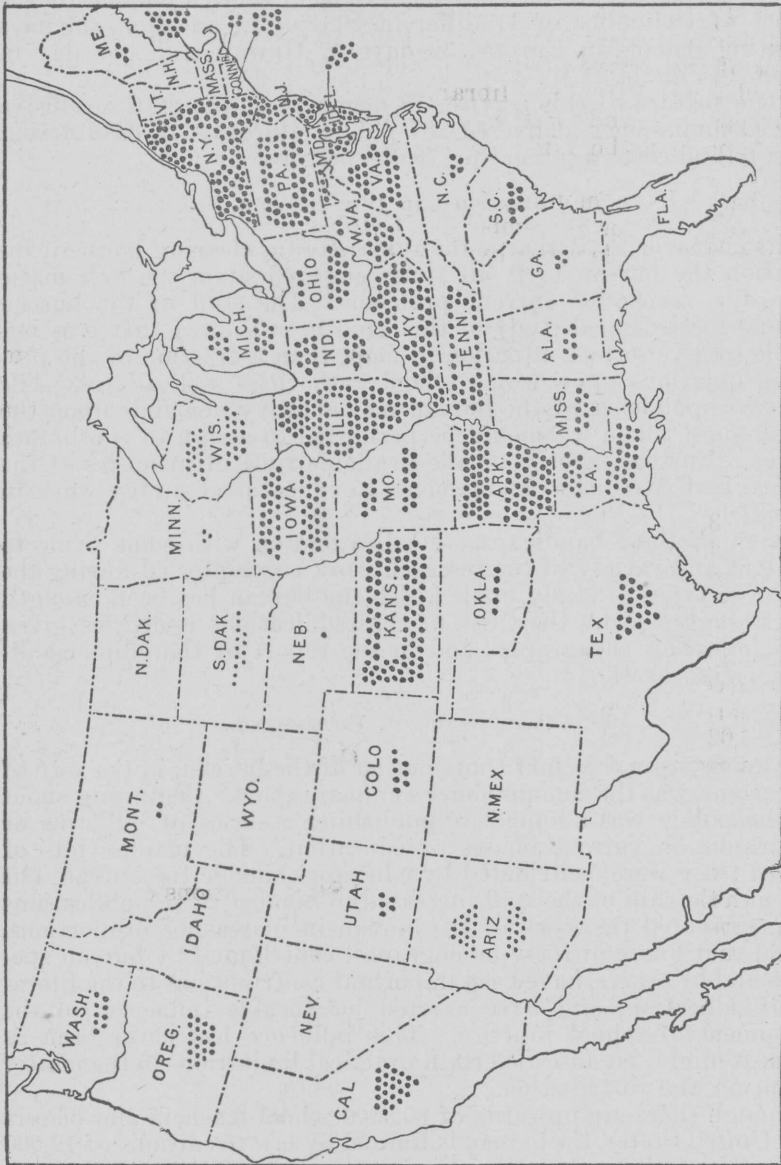


FIGURE 1.—Map showing the States in which the Bureau of Education performed field service of some kind during the fiscal year 1921-22. During this year 26 members of the staff, exclusive of the commissioner, rendered an aggregate of 1,146 days of field service (including Sundays and time spent in travel pro-rated) in 41 States, Canada, Hawaii, and several countries in Europe. Each dot represents one day of service.

32 pages, containing digests of the proceedings of important educational conferences conducted by the bureau, abstracts of the conclusions and recommendations of educational survey commissions, condensed reports of studies made in the bureau, and the like.

(4) EDUCATIONAL SURVEYS.

One of the most important types of service rendered by the bureau, and probably most far-reaching in effect, is in its conduct of educa-

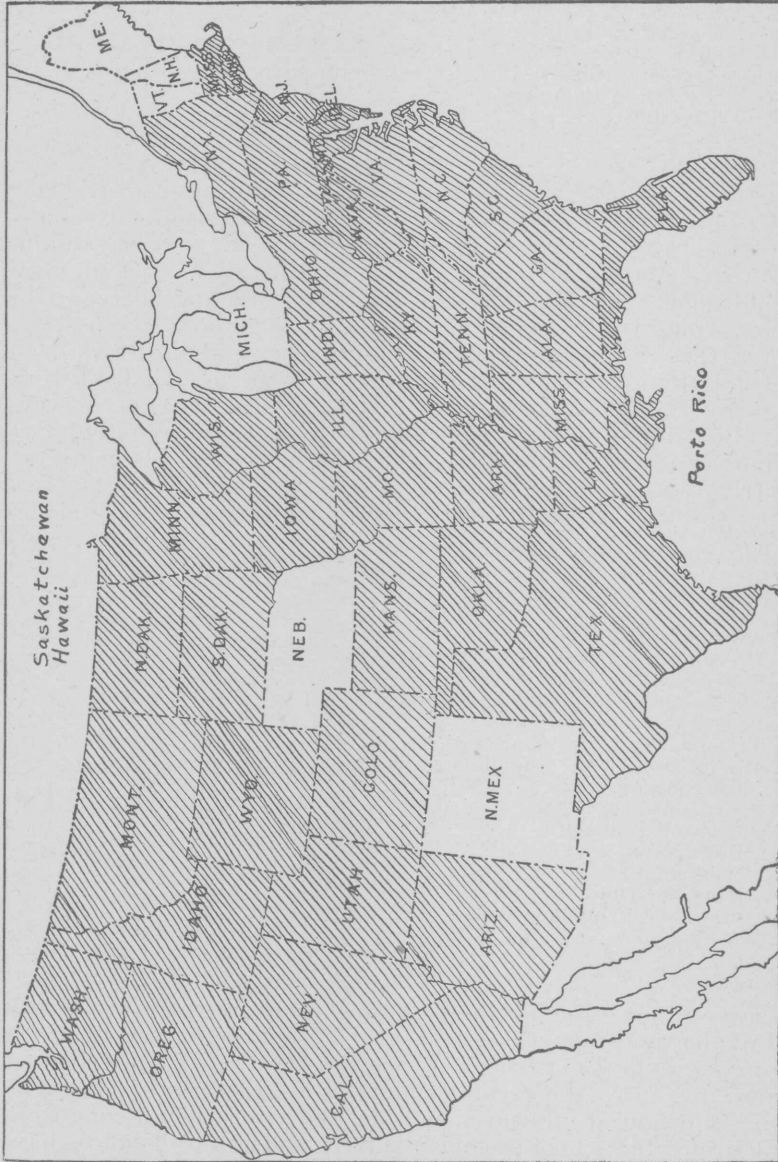


FIGURE 2.—Map showing the States in which the Bureau of Education has made educational surveys. Since it was established, in 1867, the bureau has made 136 surveys, in 42 States, the District of Columbia, Canada, Hawaii, and Porto Rico.

tional surveys. Shortly after I took office I caused a summary to be made of the activities of the bureau in this matter, and found that an aggregate of 156 surveys have been made by it, in 42 States and the

District of Columbia, also Hawaii, Porto Rico, and one of the Provinces of Canada. These surveys may be classified as follows:

(a) State public-school systems.....	9
(b) State systems for higher education.....	7
(c) Higher educational institutions.....	88
(d) Public school systems of cities.....	17
(e) School buildings in cities.....	10
(f) Public-school systems of counties.....	9
(g) Negro education in the United States (26 States and District of Columbia).....	1
(h) Unclassified.....	15
Total	156

The earliest of these was a survey of public education in the District of Columbia, made by Dr. Henry Barnard, the first Commissioner of Education, in accordance with a joint congressional resolution approved March 29, 1867, the same month in which the bureau was established. The findings were published in a special report of 912 pages, June, 1870.

Some of these surveys have been comprehensive studies, requiring the services of staffs of 20 or more experts for periods of field work varying from four to eight weeks. At the other extreme, surveys of individual institutions have been made by a single representative of the bureau in one or two days, which perhaps would be more appropriately designated as inspections.

During the fiscal year 1921-22 the following surveys were made:

(a) State system of public schools, Arkansas.....	1
(b) State system of higher education, Kansas.....	1
(c) Higher educational institutions.....	31
Arkansas, 13 colleges and universities.	
Arizona, State University.	
Oregon, 12 colleges and universities.	
Tennessee, 4 colleges.	
State College for Women, Greensboro, N. C.	
(d) Public school systems of cities.....	4
Trenton, N. J. (administration).	
Washington, D. C. (administration).	
Shreveport, La.	
Sparta, Wis.	
(e) School buildings in cities.....	3
Parkersburg, W. Va.	
Washington, N. C.	
Greenfield, Ohio.	
(f) County system of public schools.....	1
Washington County, Va.	
Total	41

The surveys made during the past fiscal year are therefore almost a third of the total number of surveys made by the bureau in the 54 years of its previous existence. (Vide fig. 3.)

In most instances the recommendations of the surveys have resulted in substantial improvements in the educational conditions and practice of the school system involved, and in no instances have the recommendations been without some practical effect.

ACTIVITIES OF DIVISIONS.

In addition to the foregoing general statements, the activities of the several research divisions may be summarized as follows:

The work of the year has been devoted largely to offering practical assistance to rural school superintendents and supervisors.

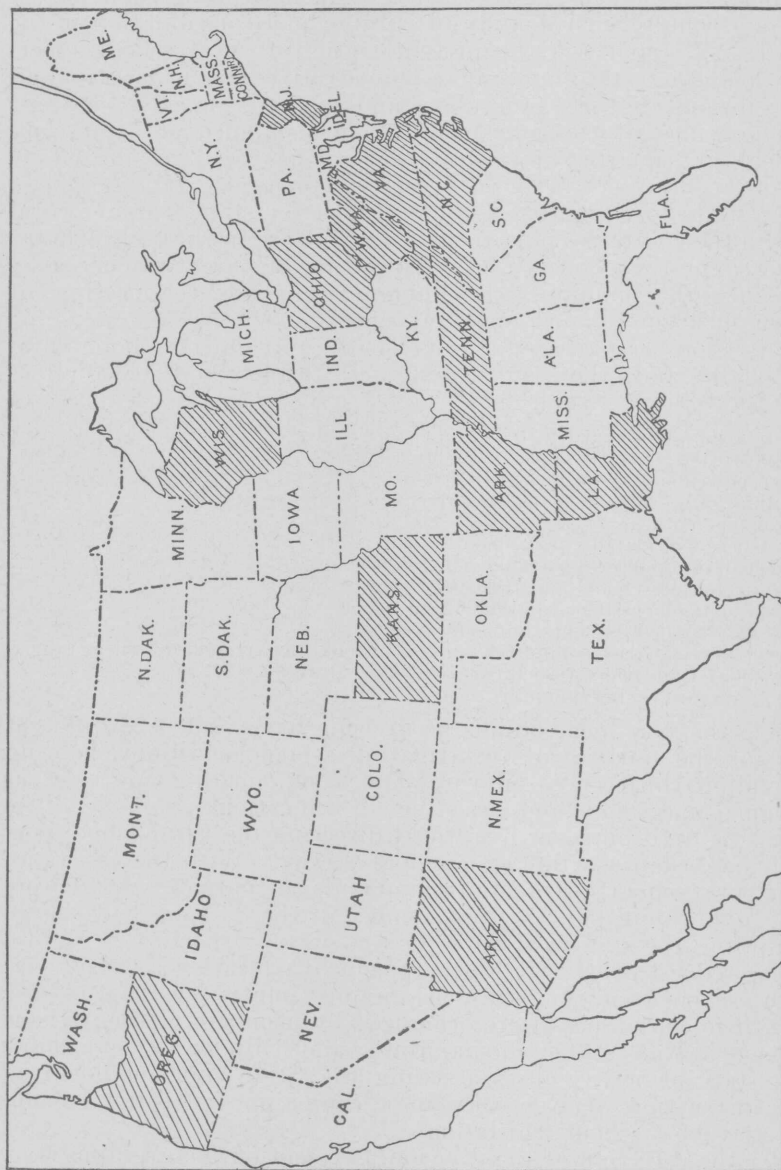


FIGURE 3.—Map showing the States in which the Bureau of Education has made educational surveys during the fiscal year 1921-22. During the year the bureau made 41 surveys, in 12 States and the District of Columbia.

Through these officers the division establishes relations also with school patrons and teachers in rural communities.

Three current movements in rural education are of fundamental importance; (1) Consolidation of small, inefficient schools into larger

ones offering increased facilities, and usually high-school opportunities; (2) employment of professionally trained supervisors, to aid in improving the work of teachers in the service; (3) improvement of one-teacher schools when consolidation is not practicable.

In the promotion of these larger movements the division has in progress a comprehensive study of rural school consolidation in the 48 States. A report on the present status of rural school supervision, including statutory and administrative provisions, as well as descriptions of successful plans and methods, is now in press. The importance of the movement to furnish adequate and comfortable living quarters for rural teachers has been recognized by the publication of a bulletin on Teachers' Homes.

Other studies in progress include: Plans for standardizing rural schools in the 48 States; objectives in agriculture in rural elementary schools; suggestions concerning organization of parent-teacher associations in rural communities; suitable programs for the meetings of such organizations; games for rural schools.

The division has prepared and assisted in circulating among rural school officers and others on request 25,070 leaflets and 20,300 circulars on the following subjects:

Consolidation and rural life.

Transportation of rural pupils at public expense.

Modern equipment for a one-room school.

Consolidation of rural schools in Maine and Connecticut.

A rural teacher's library.

What is a consolidated rural school?

A digest of State laws on transportation of pupils.

Consolidation of schools and transportation of pupils.

Salaries of teachers in rural schools in 1922.

Salaries of superintendents and supervisors.

Abstract of report of committee on resolutions, department of rural education, National Education Association, Chicago, March 2, 1922.

Projects in rural supervision.

During the year members of the division have visited 22 different States for the purpose of investigating school conditions, holding or attending conferences on rural education, making addresses at educational meetings, and assisting in educational surveys. The chief of the division spent five weeks directing the rural school portion of the Arkansas State educational survey. With the assistance of four rural school specialists from outside the bureau, schools were visited in 20 counties. Another member of the division had charge of compiling the statistical data for the survey report.

At the request of the State department of education a survey was made of school conditions in Washington County, Va.

Rural life conferences were organized by members of the division in Missouri, Kansas, Oklahoma, Iowa, and Illinois. One member of the staff spent five days assisting the State superintendent of public instruction of Kentucky in a campaign for better schools and a drive for school legislation.

Under the direction of the division, two motion-picture films were prepared, one showing methods of supervision, the other showing rural school consolidation and its results in the United States. Stereopticon slides for general circulation among school authorities have been prepared as follows: Twelve sets on school consolidation in the United States; 6 sets on transportation of school children; 6 sets on rural school activities; 3 sets on rural schools and grounds.

Much of the general correspondence of the division requires special investigation. Examples of material prepared on request of State educational authorities and others include: Definitions of consolidated school as used in the different States; list of normal schools and colleges offering special courses for preparation of rural teachers; outline of teaching methods for making rural surveys for use in summer courses in normal schools.

A revised mailing list was compiled containing more than 300 rural school supervisors and professors of rural education in normal schools and colleges. One member of the division was in charge of the preparation of the educational exhibit of the United States at the Brazilian International Centennial Exposition; another member collected and distributed information regarding educational opportunities for ex-service men; also considerable preliminary work was done on tabulating data for the Oklahoma State educational survey.

HIGHER EDUCATION DIVISION.

Surveys were made of four institutions of higher learning in Tennessee, and the resulting recommendations were immediately adopted and have been carried into effect. A survey was made of the North Carolina State College for Women and suggestions offered which have led to a reorganization of the internal administration on a more effective basis. In Oregon, where the State law requires colleges and universities to be accredited by the United States Bureau of Education, the bureau's specialist in higher education inspected twelve colleges and universities for the State department of public instruction and reported a revised list of accredited institutions.

More extended surveys of State institutions of higher learning were made in Arkansas, Arizona, and Kansas. In September, 1921, the report of the bureau's commission on the University of Arkansas was submitted to the governor and a committee of the State legislature. As a result of this report some changes have been made in the administration of the university. Certain other important recommendations await the action of the next legislature. Later a survey was made of the Arkansas State Normal School.

Under the direction of the specialist in higher education, a survey was made of the State system of higher education in Kansas by a commission including President L. D. Coffman, of the University of Minnesota; Dean A. R. Mann, of Cornell University; and J. D. Christenson, of the University of Michigan. It is expected that the report on the survey will be made about September 1, 1922.

A survey of the University of Arizona was conducted by President P. R. Kolbe, of Akron University, and Lloyd E. Blanch, the bureau's specialist in charge of land-grant college statistics. On account of a vacancy in the presidency of the university no action on the recommendations in the report has yet been taken.

The specialist in rural and technical education, in cooperation with the committee on highway and highway transport education, held a number of State conferences for the promotion of education in these fields. Of special importance were those held in Kentucky, Texas, Pennsylvania, Tennessee, Maryland, and Connecticut. Reports of the proceedings of these conferences have been published by the

bureau and by other agencies. Plans are now under way for a second national conference on highway education to be held in Washington in October, 1922.

The specialist in rural and technical education was also responsible for holding a conference at Nashville, Tenn., on negro land-grant college education, with special reference to standards in agriculture and home economics, in cooperation with the Federal Board for Vocational Education and the United States Department of Agriculture.

In addition to the bulletins and pamphlets listed under the report of the editorial division, the division of higher education has prepared circulars on the following subjects: Comparison of enrollment and endowment at 200 leading American colleges and universities; classification of student enrollment and distribution of teachers in engineering schools; current statistics on incomes, salaries, and enrollment at State universities and colleges. The following manuscripts are either completed or are nearing completion: Statistics of land-grant colleges for 1919-20 and 1920-21; decennial report on land-grant college education; report on survey of the University of Arizona; report on survey of higher education in Kansas; residence of students in higher institutions, 1920-21; the educational contribution of Hampton Institute as a land-grant college.

The schedule used in collecting data from land-grant colleges has been revised for use hereafter in collecting data from all publicly supported institutions. Addresses were delivered at the following educational meetings: Association of American Colleges; Junior College Association; Land Grant College Association; Texas State Teachers' Association; Texas State Association of Colleges; Arkansas State Teachers' Association; Kansas State Schoolmen's Club; Educational Conference of the Southern Baptist Church; South Carolina State Citizens' Conference; North Carolina Presidents of Colleges and Universities; George Washington University Faculty Club; Colleges in Tennessee, Oregon, Maryland, North Carolina, and Virginia; Conference on Negro Education in Land Grant Colleges; Interstate Conference on Education; Society for Promotion of Engineering Education; conferences on highway education in Texas, Tennessee, and Maryland.

CITY SCHOOLS DIVISION.

During the year manuscripts were prepared by the division of city schools on the following subjects: Administration of schools in the smaller cities; titles of positions in the administrative staffs of schools in cities of more than 25,000 population, with the salary attached to each position; salaries of elementary and junior high-school principals and teachers in 1,444 cities; salaries of teachers in cities of 100,000 population and over, published in report of hearing on Senate bill 3136; data regarding certain phases of school administration in smaller cities; salaries of high-school teachers; reports regarding the work-study-play or platoon school.

A survey of the public schools of Sparta, Wis., was made at the request of the board of education, to determine school building needs and to point ways of improving the school system. The recommendations of the surveys were adopted by majority vote of the citizens of Sparta.

A study of the plan of administrative organization of the public schools of Trenton, N. J., was made for the board of education of that city.

A general survey was made of the public schools of Shreveport and Caddo Parish, La., under the direction of the chief of the division, assisted by C. A. Ives, of the Louisiana State Department of Education, and Dr. F. B. Dresslar and Dr. Thomas Alexander, of Peabody College for Teachers, Nashville, Tenn. The report, covering 200 typewritten pages, was submitted to the Caddo Parish board of education and later published in full in the daily papers of Shreveport. The State superintendent of public instruction reports that the survey will be helpful not only to Shreveport and Caddo Parish but to the entire State.

School building surveys.—The division has responded to many requests from boards of education for advice in planning school building campaigns, averaging one such survey every six or seven weeks for three years past. In 1922 three school building surveys were made—at Greenfield, Ohio, Washington, N. C., and Parkersburg, W. Va. Some additional time was spent in assisting the authorities in carrying out the recommendations of the survey made last year.

The work-study-play plan.—In February, 1922, a conference of city superintendents having schools organized on the work-study-play plan was held in Chicago, which was attended by superintendents from 47 cities in 19 States. Some of the points made by the speakers include: That the plan is popular with pupils, teachers, and patrons when given a fair trial; that the plan is adaptable to any type of city, industrial or suburban, large or small; that this type of organization makes it possible for each school system and each school to have an individuality of its own; that the plan brings about an increase in the capacity of a building varying from 25 to 50 per cent; that the academic work does not suffer, but improves under the plan.

Replies to a questionnaire sent to the 41 cities in which schools are now operated on the work-study-play plan were returned from 27 cities, and show that in these 27 cities there are 153,364 children enrolled in 172 schools of this type. As a result of the Chicago conference the bureau was requested by the city superintendents of schools to serve as a clearing house of information on this phase of school development.

One specialist in this division has been making a study of the project method of teaching and the preparation of a bulletin on "Major Projects in Elementary Schools." The material was collected largely from a study of a cotton mill village in South Carolina, and shows how all the activities of a community may be brought into the various units of study in the schools. Another series of type studies was developed, using the great national highways as a basis. A bulletin on this subject for the use of classroom teachers is in preparation. In the course of this work the specialist in charge taught a class of fifth-grade children in one of the Washington schools one hour daily for three months. Other studies completed include: Requirements for promotion from kindergarten to first grade, and from first grade to second; relation of the intelligence quotient to ability in reading; relation of the course of study to ability in arithmetic; intelligence tests as applied to primary grades; primary-school equipment; recent movements in primary education.

KINDERGARTEN EDUCATION.

The mailing list of teachers and others interested in kindergarten education has been revised, and circulars have been prepared for distribution on the following subjects: The housing and equipment of kindergartens; books on the education of early childhood (revised); what they think of the kindergarten; curriculum for the kindergarten and primary grades. The project method in the kindergarten; status of the kindergarten movement in the United States. A circular of information was prepared for women's clubs and parent-teacher associations, outlining suggestions for programs for the discussion of kindergarten education. A leaflet on kindergarten legislation is in preparation, for use in those States in which such legislation is being considered.

Two sets of lantern slides illustrating kindergarten equipment and methods have been in constant circulation, eleven States being served during the year. In cooperation with the International Kindergarten Union, a motion-picture film is being prepared. Sixteen cities will each contribute one section of the film. Typical kindergarten activities will be shown in the units from the contributing cities, and the units will be coordinated by the bureau's specialists into one film, which will be available for general circulation.

The two specialists made 46 public addresses before various organizations; four conferences were held with kindergarten teachers in Philadelphia; 16 kindergarten training schools were visited in Connecticut, New York, New Jersey, Pennsylvania, Virginia, and the District of Columbia, as a basis for drafting constructive suggestions in regard to training courses.

One specialist was an official delegate to the Pan-Pacific Conference on Education held in Honolulu in August, 1921, attendance being made possible by the cooperation of the International Kindergarten Union and the Pan-Pacific Union in paying part of the expense. One specialist represented the bureau at the Pan-American Conference called by the League of Women Voters, and presided at the educational session.

RADIO SERVICE.

In June, 1922, the Commissioner of Education requested from the interdepartment advisory committee on Government radio broadcasting that the Bureau of Education be granted a radio service through broadcasting in Washington by radio telephony through one of the Government high-power stations. The request was based on the fact that (1) one of the most important audiences which the Bureau of Education has to reach is the general public, particularly parents and taxpayers, since public education can not progress any faster than the state of public opinion about education; and (2) that at the present time this audience has grown too vast; the need for continuous education too great; the necessity for disseminating information quickly too frequent to be met any longer by the long-delayed infrequent bulletin. It was pointed out that a new situation in education has arisen and a new method of meeting it must be found. And it is believed that radio furnishes such a method. It is cheaper than printing; it reaches its audience quicker; it reaches

the mass of people who will not read printed articles; it is more effective because it has the intimate contact between speaker and audience; and above all, it can be continuous in service. The only thing that educates the public is continuous education. Radio can be the means of such continuous education.

SERVICE DIVISION.

The organization of the technical staff includes, in addition to the divisions of rural schools, city school systems, and higher education, a number of miscellaneous specialists in divisions which serve definitely more than one of these fields. The service division includes specialists in school hygiene and physical education, industrial education, home economics, commercial education, educational legislation, and foreign education.

School hygiene and physical education.—The scope of work comprehended under this designation is very extensive, including the hygiene of schoolhouse construction and operation; the hygiene of instruction and school management; school health supervision (organization and administration); education of defective and handicapped children; health teaching; physical education. The bureau attempts to maintain a limited information service in each of these lines, and to maintain contacts and advisory relations with important organizations concerned with them.

To this end the bureau has continued active cooperative relations with the United States Interdepartmental Social Hygiene Board, the Public Health Service, the department of superintendence and the commission on secondary education of the National Education Association, the Child Health Organization, the American Red Cross, the National Child Health Council, the American Social Hygiene Association, the National Tuberculosis Association, the United States Chamber of Commerce, the American Physical Education Association, the American School Hygiene Association, the American Child Hygiene Association, and other important agencies.

Three important national conferences of teachers and others have been held with reference to health and physical education. In addition, the specialist in school hygiene was absent on leave without pay for 60 days, investigating instruction in hygiene in higher institutions for the American Social Hygiene Association.

In the field of health education the division has centered its efforts mainly on stimulation and encouragement of health teaching in the schools. One new pamphlet was published, "Suggestions for a program for health teaching in the elementary schools." This is probably the most valuable number in the health education series to date, and met with an immediate demand that exhausted the edition early in the year. Two additional manuscripts are ready for the press: "Milk and our school children," and "Organization of school health work."

The usefulness and popularity of the health education publications are evidenced by the publicity they have received and by the sales through the Superintendent of Documents. For example, three years after the pamphlet "Diet for the school child" was published an editorial in regard to it was printed in a San Francisco paper, with

the result that 216 requests for it came to the bureau in one mail. From one State department of education came a request for 90,000 copies of one pamphlet. More than 250,000 of a single health publication were sold during the year, and this bureau now holds the record for the largest number of copies of any Government publication sold within the same length of time.

A considerable amount of service was rendered in the field of schoolhouse construction and sanitation, the major part of which was performed by the part-time special agent stationed at Peabody College for Teachers, Nashville, Tenn. The office work included: (1) Answering miscellaneous inquiries in regard to schoolhouse construction and operation; (2) specific advice to school boards and architects in regard to plans for school buildings; (3) preparation of manuscripts for bulletins. Field service included: (1) Assisting in the bureau survey of the public schools of Shreveport, La.; (2) thirteen visits to towns and cities in Alabama, North Carolina, Tennessee, and Kentucky to assist school boards and architects in school-building plans.

A bulletin on "Recent State legislation for physical education" was revised and published. A preliminary report on present and prospective costs of physical education in the United States was prepared for the chairman of the House Committee on Education.

Industrial education.—The specialist in industrial education arranged the program and conducted a three-day conference on the preparation of teachers of manual arts and industrial education, held at the University of Michigan December 8-10, 1921, and four conferences of specialists in industrial education on the following general topics:

Kansas City, Mo., January 4, "Problems of organization in industrial education."

Milwaukee, Wis., January 11, "Public-school supervision of employed boys and girls."

Rochester, N. Y., April 5, "Measuring the student's progress in shopwork."

Cincinnati, Ohio, May 1, "Manual arts in the junior high school."

The aggregate attendance at the five conferences was 319 delegates, representing 27 States and the District of Columbia. Reports of the proceedings of similar conferences held during the preceding year were published, as follows:

Higher standards for teachers of industrial subjects.

Organization of instructional material in individual units.

The contributions of correspondence instruction methods to industrial education.

Helping the shop teacher through supervision.

Home economics.—The major project of the specialist in home economics this year has been home economics in junior and senior high schools. As a means of stimulating interest in improved methods and as a means of studying the most progressive school systems the specialist conducted a series of regional conferences of teachers and supervisors, as follows:

New York City, February 16, 17, and 18.

Chicago, Ill., March 3 and 4.

Spokane, Wash., April 4, 5, and 6.

Portland, Oreg., April 7 and 8.

San Francisco, Calif., April 12 and 13.

Los Angeles, Calif., April 21 and 22.

Logan, Utah, April 28.
Salt Lake City, Utah, April 29.
Denver, Colo., May 5 and 6.
Kansas City, Mo., May 12 and 13.
Boston, Mass., July 6.

The attendance at these conferences ranged from 40 to 220, and as a result upward of 1,200 teachers of home economics were reached directly. The specialist represented the bureau at the following educational conventions, and numerous addresses were delivered: Department of Superintendence, American Home Economics Association, Land Grant College Association, Country Life Association, biennial meeting of the National Federation of Women's Clubs, Child Health Conference, Pennsylvania State College Conference on Education for Women, Ohio Home Economics Association, Maryland Home Economics Association, Virginia State Farmers' Institute.

Home economics departments in 47 schools in 14 cities were visited; methods of teaching and types of equipment were observed; conferences with teachers and supervisors were held. Home economics departments in five State agricultural colleges and two State universities were visited.

Bulletins and circulars of information were prepared and published on the following topics:

- Home economics in secondary schools.
- Present status of home economics education.
- Equipment and rooms for home economics departments.
- State certification for home economics teachers.
- Home economics courses for rural schools.

A complete list of institutions of higher education offering courses in home economics was prepared, also a list of city supervisors.

The investigation of home economics instruction showed that approximately 500,000 pupils are now studying this subject in 8,000 high schools, and that it is compulsory in about two-thirds of all the largest city school systems. Home economics is being introduced into about 600 new high schools each year, and departments are now maintained in more than 600 universities, colleges, and normal schools.

Commercial education.—In the United States production has been allowed to develop without regard to marketing processes, both for domestic and foreign trade. More direct and more effective methods of distribution must be developed, but these require closer coordination of schools of commerce and engineering. When the bureau began work upon this problem several years ago engineering schools generally recognized in their curricula only about three units in business subjects and economics. At the present time 29 out of 129 engineering schools permit from 3 to 30 units to be taken in this field. The schools of commerce have been even slower to act, but they are now beginning to permit electives in engineering subjects.

Another important project is training for foreign service. The bureau called the first public conference on this subject in December, 1915, and at that time there were no schools in the United States offering instruction in preparation for foreign service, either for Government service or for commerce. At the present time 70 institutions offer some kind of training for foreign service, and this development is more or less attributable to the activities of the bureau.

The specialist in commercial education conducted 10 regional conferences, the chief results of which have been an increasing number of colleges and universities allowing entrance credits in commercial subjects and the accumulation of data for use in formulating courses of study for the several regions. This department maintains cooperative relations with the United States Chamber of Commerce, National Foreign Trade Council, Association of Collegiate Schools of Business, National Commercial Teachers' Federation, National Federation of Business and Professional Womens' Clubs, and other agencies. Six circulars on commercial education were issued, and a bulletin on "Training for foreign service."

Educational legislation.—As a means of giving information and assistance in the promotion of efficient school systems throughout the country, the bureau, through its school-law section, collects and compiles the school laws of the several States, particularly those of recent enactment, and publishes material relative thereto. The school-law work of the bureau falls into five divisions: (1) Circulars of information relative to the progress of educational measures through legislatures; (2) formal digests, or summaries, of educational enactments after their official publication in volumes of acts or session laws; (3) periodic interpretative reviews of legislation; (4) special studies involving school laws; (5) correspondence and personal conferences in which information, advice, and assistance are given.

Within the past year the specialist in school legislation made a digest of the enactments of the 42 legislatures in regular session in 1921 and of several special sessions; these digests were combined with those of the calendar year 1920, and at the close of the fiscal year were in process of publication as a bulletin of about 250 pages. While legislatures were in session in the winter and spring of 1922, several "legislative circulars" were issued. Within the year a number of brief special studies were made, and a more intensive study of the system of educational administration and the plan of school support of the State of Oklahoma was completed.

A considerable part of the time of the specialist in school legislation is devoted to the correspondence of the bureau which involves school law and to giving legal assistance to other specialists in the office. On several occasions specific assistance has been rendered in formulating State legislation, and some organizations of national scope which are interested in education have been assisted in collecting their data and organizing their efforts for school improvement.

Foreign educational systems.—The present personnel consists of one specialist in foreign educational systems, two full-time translators, and one part-time translator. For the efficiency of the service there is urgent need of an additional translator to cover the languages of important nations not now represented.

The function of the division is to serve as an agency of accurate educational information of all countries outside of the United States; to note educational movements and record progress; to give accurate account of the nature and operation of the principal school systems of the world; to organize, interpret, and evaluate this material in the light of the educational system of the United States; to diffuse this knowledge among the educators of the country through correspondence, lectures, conferences, and published reports.

During the year attention has been centered upon the following problems:

(1) Evaluation of elementary and secondary school credits from abroad in terms of corresponding credits from schools in the United States.

(2) Requirements and opportunities for the exchange of students, teachers, and professors.

(3) The essential ascertainable facts concerning conditions in the present reorganized school systems of all foreign countries.

(4) Sources, amount, uses, and form of distribution of school revenues in the more important foreign countries.

(5) The status, rank, preparation, qualifications, and salaries of teachers in foreign countries.

(6) Continuation schools in foreign countries, including provisions made for adult education, and the results.

(7) Physical education and child welfare in the schools of foreign countries.

Many inquiries have been received for information on the first of these topics. There are at present at least 10,000 foreign students in our institutions of higher learning, and probably as many more in secondary schools. This interchange of students is a desirable practice, making for permanent peace and international comity, and is encouraged by every progressive nation. It throws, however, an extra burden on educators and school officers of every country concerned. It is extremely difficult to classify and adjust these foreign students to the new system in order that they may accomplish the best results.

Under existing conditions students coming from the same institution abroad have received differences of three years in the ratings allowed by different institutions in the United States. The bureau is gathering data on this subject, and will in time be in position to render valuable service.

GENERAL SERVICE ACTIVITIES.

STATISTICS.

During the past year the statistical section has completed the following reports covering the school year ended June, 1920: (1) Statistics of private high schools and academies; (2) statistics of private business and commercial schools; (3) statistics of teachers' colleges and normal schools; (4) statistics of universities, colleges, and professional schools; (5) statistics of public and private kindergartens; (6) statistics of city school systems; (7) statistics of State school systems.

In the summer of 1921 a large section of the Educational Directory was prepared, including officials in State departments of education, county and city superintendents of schools, presidents of colleges, universities, professional schools and normal schools, and directors of summer schools.

Statistics of public high schools were recorded on punched cards ready for tabulation. The chapter on public high schools, with the graphic and explanatory material of the statistical chapters men-

tioned above, will complete the statistical chapters prepared for the Biennial Survey of Education, 1918-1920.

During the year some changes were made in the blanks for collecting statistics of city school systems and of public universities, colleges, and professional schools. A questionnaire was prepared and circulated for the American Classical League regarding the study of foreign languages in secondary schools. Replies to this questionnaire and reports of public high schools are now being edited.

Up to the present time it has been necessary for the bureau to depend entirely upon the questionnaire method for the collection of statistics. Experience has shown that as school systems and educational institutions have become more complex in their organization it is more and more difficult to secure accurate and complete statistical reports. The bureau should have a number of field agents who could be sent to State departments of education, city superintendents of schools, and to heads of educational institutions for the purpose of securing the necessary statistics.

EDITORIAL DIVISION.

Increased supply of paper during the fiscal year 1921-22 afforded relief in the printing situation and resulted in the delivery of several documents whose printing had been ordered months before. The longest delay was in the bound volumes of the Biennial Survey of Education for 1916-1918, the printing of which was suspended for more than a year. This suspension, however, was of less importance than the character of the document would seem to indicate, because the several chapters had been issued long before in the form of "advanced sheets." All the information had thus been given to the public, and the bound edition which suffered the serious delay was intended principally for permanent preservation in libraries.

Other documents, however, had been delayed nearly as much and a number of manuscripts of more than usual importance were held in the Bureau of Education because there was no possibility of action upon them. Among them were the papers that were intended to form the first volume of the Biennial Survey of Education for 1918-1920. A few of these were printed, but the delay which the others suffered was so long continued that it was finally decided to omit entirely the publication of this volume for 1918-1920. This decision did not, however, affect the statistical chapters, which form a separate volume.

Publications.—The plan of publication of the Bureau of Education includes (1) a biennial survey of education, comprising a complete statistical and textual résumé of educational conditions in the United States, with brief statements of the conditions in the principal foreign countries; (2) an annual report of the operations of the Bureau of Education; (3) bulletins or monographs usually containing comprehensive reports of educational research; (4) leaflets, comprising less extensive reports or discussion of educational movements or occurrences; (5) the periodical *School Life*, which contains information of important educational events or plans, reported as early as practicable. It describes the progress of education all over the world in brief and readable articles.

School Life.—The usual number of bulletins and leaflets were issued during 1921–22, but *School Life*, which had been published regularly since August 1, 1918, was suspended after the December, 1921, number. The congressional authority under which it had been printed expired at that time because of the failure of the Senate and the House to agree upon the same measure to govern periodicals issued by Government agencies.

The question was discussed from time to time on the floor of the House, and finally a joint resolution was adopted May 11, 1922, which renewed the authorization, but under very different conditions. Formerly 40,000 copies were printed for free distribution, but under the new law that number must be cut to 2,000. The result is the principal distribution must in future be by paid subscription. The price has been fixed by the Superintendent of Documents at 30 cents a year, but a reduction will be made to 25 cents if 25 copies are ordered to the same address. Ten numbers are issued each year, none being published in July and August. It is expected that the first number after the resumption of publication will be that of September, 1922.

Selection of manuscripts.—A marked change has been made in the method of selecting manuscripts for publication as documents of the Bureau of Education. In the past this duty was performed by the commissioner personally, after obtaining the advice of others whom he selected in each instance according to the character of the manuscript under consideration. This duty having grown to such extent as to be a burden on the commissioner, he has transferred it to a committee consisting of the chief clerk as chairman, the assistant to the commissioner, and the chief of the editorial division.

Distribution of publications.—Like all other Government bureaus, the Bureau of Education distributes its publications through the office of the Superintendent of Documents. During the year 1921–22 that officer mailed for this bureau 11,596 annual reports of the Commissioner of Education; 598,016 bulletins; 245,485 leaflets, circulars, and miscellaneous publications; 200,000 copies of *School Life*; and 5,000 copies of the annual index to that periodical. In all, 1,060,097 documents were distributed. In this statement the Biennial Survey of Education is classed as a bulletin. The letters handled by the editorial division during the year amounted to 42,580.

Allotment to divisions.—An experiment was made during this fiscal year of formally allotting the printing fund to the several divisions and purposes for which printing is required. A memorandum approved by the commissioner, dated October 18, 1921, assigned the following sums to the purposes named: Higher education, \$5,000; rural schools, \$6,000; city schools, \$7,000; kindergarten, \$500; industrial education, \$1,000; home economics, \$1,500; health education, \$5,000; legislation, \$2,000; library, \$4,000; home education, \$500; statistics, \$11,735; bound volumes Biennial Survey, \$6,563; *School Life*, \$12,828; general documents, \$7,874; miscellaneous, \$2,000; total, \$75,000.

Later in the fiscal year the allotment of funds for the printing of the Bureau of Education was reduced by the Secretary of the Interior to \$65,000, and in the meantime the publication of *School Life* had been suspended. These events, together with other developments, necessitated a new allotment of the bureau's printing funds in Febru-

ary, 1922. The following table shows the expenditures for the several purposes stated:

Cost of printing for the purposes named, 1921-22.

	Work completed.	Unfinished at end of year.	Total ordered.
Higher education.....	\$4,197.69	\$1,363.95	\$5,561.64
Rural schools.....	4,960.99	966.71	5,927.70
City schools.....	5,093.17	649.19	5,742.36
Kindergarten.....	687.37	0	687.37
Industrial education.....	342.72	44.83	387.55
Home economics.....	879.59	84.71	964.30
Health education.....	3,054.99	665.57	3,720.56
Commercial education.....	1,386.48	86.88	1,473.36
Legislation.....	1,297.54	546.60	1,844.14
Library.....	3,030.13	72.55	3,102.68
Home education.....	542.49	34.90	577.39
Statistics.....	8,252.51	314.36	8,566.87
Biennial survey.....	5,942.22	113.55	6,055.77
School life.....	4,199.52	0	4,199.52
General.....	7,304.46	1,197.19	8,501.65
Miscellaneous.....	1,834.38	45.56	1,879.94
Total.....	53,006.25	6,186.55	59,192.80

LIST OF PUBLICATIONS OF THE BUREAU OF EDUCATION JULY 1, 1921, TO JUNE 30, 1922.

BULLETINS 1919.

- No. 88. Biennial Survey of Education, 1916-1918. Vol. 1.
 No. 89. Biennial Survey of Education, 1916-1918. Vol. 2.
 No. 90. Biennial Survey of Education, 1916-1918. Vol. 3.
 No. 91. Biennial Survey of Education, 1916-1918. Vol. 4.

BULLETINS 1920.

- No. 30. State laws relating to education, enacted in 1918-19. W. R. Hood.
 No. 39. Opportunities for foreign students at colleges and universities in the United States. S. P. Capen.
 No. 47. Proceedings of the fifth and sixth annual meetings of the National Council of Primary Education.
 No. 48. Statistics of State universities and State colleges for the year ended June 30, 1920.

BULLETINS 1921.

- No. 2. Survey of the schools of Wilmington, Del. *Part 2.*
 No. 5. Part-time education of various types: A report of the Commission on the Reorganization of Secondary Education.
 No. 6. Opportunities for study at American graduate schools. G. F. Zook.
 No. 7. Organization for visual instruction. W. H. Dudley.
 No. 8. Foreign criticism of American education. W. J. Osburn.
 No. 9. Present status of music instruction in the colleges and high schools of the United States. Osbourne McConathy.
 No. 10. The visiting teacher. Sophia C. Gleim.
 No. 11. Pharmaceutical education. Advance sheets from the Biennial Survey of Education, 1918-1920.
 No. 12. English grammar in American schools before 1850. R. L. Lyman.
 No. 13. The housing and equipment of kindergartens.
 No. 14. Education of the deaf. Percival Hall. Advance sheets from the Biennial Survey of Education, 1918-1920.
 No. 15. Medical education, 1918-1920. N. P. Colwell. Advance sheets from the Biennial Survey of Education, 1918-1920.
 No. 16. Special features in the education of the blind. E. E. Allen. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 17. Educational boards and foundations. Henry R. Evans. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 18. Education in homeopathic medicine. W. A. Dewey. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 19. Kindergarten education. Julia Wade Abbot. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 20. Developments in nursing education since 1918. M. Adelaide Nutting and Isabel M. Stewart. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 21. Higher education. G. F. Zook. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 22. The certification of teachers governed by general State laws and regulations. Katherine M. Cook.

No. 23. Monthly record of current educational publications, May-June, 1921.

No. 24. Suggestions for the reorganization of the schools in Currituck County, N. C. Katherine M. Cook.

No. 25. A school building program for Athens, Ga. Alice B. Fernandez.

No. 26. Educational survey of Elizabeth City, N. C. W. T. Bawden.

No. 27. Training for foreign service. Glen Levin Swiggett.

No. 28. Educational survey of Wheeling, W. Va.

No. 29. Monthly record of current educational publications, September, 1921.

No. 30. Salaries of administrative officers and their assistants in school systems of 100,000 inhabitants or more. W. S. Deffenbaugh.

No. 31. Monthly record of current educational publications, Index. February, 1920-January, 1921.

No. 32. The reorganization of mathematics in secondary education. A report of the commission on the reorganization of secondary education.

No. 33. Music departments of libraries. A report of a committee of the music teachers' national association.

No. 35. The work of the Bureau of Education for the natives of Alaska. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 36. Major projects in elementary schools. Florence C. Fox.

No. 38. Standards in graduate work in education. Leonard V. Koos.

No. 39. Educational reconstruction in Belgium. Walter A. Montgomery. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 40. Agricultural education. C. D. Jarvis. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 41. Educational work of the Boy Scouts. Lorne W. Barclay. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 42. Teacher placement by public agencies. J. F. Abel. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 43. Business training and commercial education. Glen Levin Swiggett. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 44. Education in forestry. Proceedings of the Second National Conference, New Haven, Conn., December 17-18, 1920.

No. 45. School grounds and play. Henry S. Curtis.

No. 46. Educational work of the Girl Scouts. Louise Stevens Bryant. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 47. Education for highway engineering and highway transport. Report of the regional conference held at University of Pittsburgh, November 26, 1920.

No. 48. Educational directory, 1921-22.

No. 49. Monthly record of current educational publications, October, 1921.

No. 51. Statistics of nurse training schools, 1919-20. Advance sheets from the Biennial Survey of Education, 1918-1920.

No. 52. Record of current educational publications to December 20, 1921.

No. 53. Statistics of State universities and State colleges for the year ended June 30, 1921.

BULLETINS 1922.

No. 1. Recent State legislation for physical education. Thomas A. Storey, Willard S. Small, Elon G. Salisbury.

No. 2. Administration of schools in the smaller cities. W. S. Deffenbaugh.

No. 3. Preparation of teachers of the social studies for the secondary schools. Edgar Dawson.

No. 4. Statistics of private commercial and business schools, 1919-20.

No. 5. Reorganization of home economics in secondary schools. A report of the commission on the reorganization of secondary education.

- No. 6. State policies in public school finance. Fletcher Harper Swift.
 No. 9. Statistics of private high schools and academies. Advance sheets from the Biennial Survey of Education, 1918-1920.
 No. 13. Review of educational legislation. W. R. Hood. Advance sheets from the Biennial Survey of Education, 1918-1920.

REPORTS.

Report of the Commissioner of Education for the year ended June 30, 1921.

SECONDARY SCHOOL CIRCULARS.

- No. 8. The function concept in secondary school mathematics: Report of the National Committee on Mathematical Requirements.
 No. 10. Method and content of French course in accredited high schools of the South. J. A. Capps.

READING COURSES.

- No. 1. The world's great literary bibles. (Reprint.)
 No. 2. Great literature—ancient, medieval, and modern. (Reprint.)
 No. 3. Reading course for parents. (Reprint.)
 No. 4. Reading course for boys. (Reprint.)
 No. 5. Reading course for girls. (Reprint.)
 No. 6. Thirty books of great fiction. (Reprint.)
 No. 7. Thirty world heroes. (Reprint.)
 No. 8. American literature. (Reprint.)
 No. 9. Thirty American heroes. (Reprint.)
 No. 10. American history.
 No. 12. Heroes of American democracy.
 No. 19. Master builders of to-day (and reprint).
 No. 20. Teaching.
 No. 21. Twenty good books for parents (and reprint).

HEALTH EDUCATION PUBLICATIONS.

- No. 2. Diet for the school child. (Revised edition.)
 No. 5. Child health program. (Reprint.)
 No. 6. Further steps in teaching health. (Reprint.)
 No. 8. Health training for teachers. (Three reprints.)
 No. 9. Your opportunity in the schools. (Two reprints.)
 No. 10. Suggestions for a program for health teaching in the elementary schools.
 Right height and weight for girls. (Reprint.)
 Right height and weight for boys. (Reprint.)
 Poster—Health, strength, and joy.
 Health card No. 1. What is health? (Reprint.)
 Health card No. 2. Rules of the game. (Reprint.)
 Price list. (Reprint.)
 School Life supplement, No. 9.

HIGHER EDUCATION CIRCULARS.

- No. 23. The Slavonic languages and literature in American colleges and universities. Carl W. Hasek.
 No. 25. The Rhodes scholarships.

RURAL SCHOOL LEAFLETS.

- No. 1. School consolidation and rural life.
 No. 2. Transportation of pupils at public expense. J. C. Muerman.
 No. 3. Modern equipment for one-teacher schools. Maud C. Newbury.

HOME ECONOMICS CIRCULARS.

- No. 5. Government publications of interest to home economics teachers and students. (Revised.)
 No. 10. Present status of home economics education.
 No. 11. Equipment and rooms for home economics departments.
 No. 12. State certification of home economics teachers.

LIBRARY LEAFLETS.

- No. 14. What libraries learned from the war. Carl H. Milam.
 No. 15. List of references on vocational education.

TEACHERS' LEAFLETS.

- No. 15. A survey of the writing vocabularies of public-school children in Connecticut. W. F. Tidyman.
 No. 16. Credit for the professional improvement of teachers. Bertha Y. Hebb.

KINDERGARTEN CIRCULARS.

- No. 7. Books on the education of early childhood.
 No. 8. Folder—What they think of the kindergarten.

INDUSTRIAL EDUCATION CIRCULARS.

- No. 7. Higher standards for teachers of industrial subjects. W. T. Bawden.
 No. 8. Organization of instructional material in individual units. W. T. Bawden.
 No. 9. The contribution of correspondence instruction methods to industrial education. W. T. Bawden.
 No. 10. Helping the shop teacher through supervision. W. T. Bawden.

MISCELLANEOUS PUBLICATIONS.

- The teaching of civics as an agency for community interest and citizenship.
 J. J. Tigert.
 The Constitution of the United States.
 Available publications of the United States Bureau of Education, September, 1921, and reprint of same.
 Broadside: Fire Prevention Day.

SCHOOL LIFE.

- Vol. 6, No. 12.
 Vol. 7, Nos. 1-4.
 Index and title page.
 Vol. 6, January-June, 1921.

UNFINISHED PRINTING JUNE 30, 1922.

BULLETINS.

1921.
 34. Status of the rural teacher in Pennsylvania. Leroy W. King.
 37. Malnutrition and school feeding. John C. Gebhart.
 50. Engineering education after the war. Arthur M. Greene, Jr.
 1922.
 7. A report of the higher institutions of Arkansas. George F. Zook.
 8. Statistics of teachers' colleges and normal schools, 1919-20. H. R. Bonner.
 Advance sheets from the Biennial Survey of Education, 1918-1920.
 10. Supervision of rural schools in the United States. Katherine M. Cook.
 11. Accredited secondary schools in the United States.
 12. Dormitories in connection with public secondary schools. Edith A. Lathrop.
 14. Status of sex education in high schools.
 15. A kindergarten first-grade curriculum.
 16. The district owned or controlled teacher's home. J. C. Muerman.
 17. Statistics of city school systems. Advance sheets from the Biennial Survey of Education, 1918-1920.
 18. The residence of students in universities and colleges. George F. Zook.
 19. Proceedings of the junior college conference, June, 1920.
 20. State laws relating to education enacted in 1920 and 1921. W. R. Hood.
 21. Record of current educational publications to May 15, 1922.
 22. Statistics of kindergartens, 1919-20. Advance sheets from the Biennial Survey of Education, 1918-1920.
 23. High-school buildings and grounds. A report of the Commission on the Reorganization of Secondary Education.

- 24. Functions and administration of school janitor service. John A. Garber.
- 25. Higher education in Australia and New Zealand. Charles Franklin Thwing.
- 26. Philanthropy in the history of American higher education. Jesse Brundage Sears.
- 27. Statistics of agricultural and mechanical colleges for 1919 and 1920. Walton C. John.

READING COURSES.

- 17. Foreign trade.
- 18. Dante.
- 22. Agricultural and country life.

HEALTH EDUCATION SERIES.

- 7. The lunch hour at school. (Reprint.)
- 11. Milk and our school children.

RURAL SCHOOL LEAFLETS.

- 4. Consolidation of schools in Maine and Connecticut.

HOME ECONOMICS CIRCULARS.

- 13. Home economics in rural schools.

LIBRARY LEAFLETS.

- 16. List of references on rural life and culture.

COMMERCIAL EDUCATION LEAFLET.

- 1. Chicago public high-school course in retail selling and advertising. William Bachrach.

INDUSTRIAL EDUCATION CIRCULARS.

- 7. Higher standards for teachers of industrial subjects. W. T. Bawden. (Reprint.)
- 9. The contribution of correspondence instruction methods to industrial education. W. T. Bawden. (Reprint.)

MISCELLANEOUS PUBLICATIONS.

Modern foreign languages in training for foreign service. (Reprint, pp. 123-140, Bulletin, 1921, No. 27.)

Suggestions to authors and typists.

LIBRARY.

A principal activity of the library division is the preparation of answers to letters requesting information or publications concerning particular topics in the field of education. Much research in printed sources of information and elsewhere is often required to collect the material desired by the writers of these letters. During the year covered by this report the library prepared answers to 4,476 such letters of inquiry. Nearly 1,000 visitors from outside were also registered as directly consulting the library and receiving assistance, and many requests by telephone for information and service were answered by the reference staff. The number of volumes loaned to borrowers outside the office was 2,077, many of which were forwarded by mail to points away from Washington.

The library also continued its usual assistance to members of the bureau in the performance of their official duties.

A large number of the printed, mimeographed, and typewritten bibliographies on educational subjects prepared by the library were

distributed. During the year 38 new bibliographies were compiled, and 218 of the reference lists already on file were revised and brought up to date.

Three numbers in the series of library leaflets were issued during the year, as follows: No. 14, "What libraries learned from the war," by Carl H. Milam; No. 15, List of references on vocational education; No. 16, List of references on rural life and culture. The manuscript of a list of references on educational tests and measurements was also prepared for printing as a library leaflet, but publication of this list was suspended pending the preparation of a more comprehensive bibliography on the same subject with the cooperation of outside agencies.

Numbers of the monthly record of current educational publications were issued for September and October, 1921, respectively. Since the latter date the law has required the discontinuance of the record as a periodical, but two numbers have been issued at irregular intervals, giving the new publications received by the Bureau of Education to May 15, 1922. The compilation of an annual index to the monthly record for 1921, to be published in bulletin form, was nearly completed.

The chief of the library division contributed to *School Life* from September to December, 1921, inclusive, an annotated list of new books in education, covering in each case about a page of the periodical.

The total number of volumes catalogued and classified during the year was 3,431; titles, 2,566. The cataloguing of the new books received was kept up to date, and considerable progress was made besides in handling earlier accessions which still remained uncatalogued. Cooperation with the card division of the Library of Congress in the production of printed catalogue cards for educational books was continued.

The accessions to the library during the year were as follows: Volumes and pamphlets acquired by gift, by exchange, and by purchase, 1,020; serial publications, 3,203; periodical numbers, 8,977; volumes received from bindery, 565. Copyright transfers from the Library of Congress totaled 490 volumes.

The chief of the division attended the annual conference of the American Library Association, held at Detroit, Mich., June 26 to June 30, 1922, as official representative of the bureau. In cooperation with the committee on Federal and State relations of the American Library Association, preliminary plans have been made for a new edition of *Bulletin*, 1915, No. 25, "Public, society, and school libraries," and it is hoped that the Bureau of Education may begin to collect statistics for this new bulletin early in 1923.

An integral part of the work carried on under the library division is the work of home education, which was inaugurated in the bureau in 1913 to help parents to further their education at home; to help them in the care and training of their children before they are of school age; to help the boys and girls to further their education after they have left school; and to promote the closer cooperation of parents and teachers. As the work progressed it became evident that the field of greatest usefulness for the bureau in this direction was in the extension of education into the home in the nature of reading courses for men and women who had left school, but who wished to further their education under guidance.

Reading courses containing lists of books prepared by leading specialists in the United States have been issued from time to time. At present there are 22 courses, as follows:

1. World's Great Literary Bibles.
2. Great Literature, Ancient, Medieval, and Modern.
3. Reading Course for Parents.
4. Miscellaneous Reading for Boys.
5. Miscellaneous Reading for Girls.
6. Thirty Books of Great Fiction.
7. Thirty World Heroes.
8. American Literature.
9. Thirty American Heroes.
10. American History.
11. France and Her History.
12. Heroes of American Democracy.
13. The Call of Blue Waters.
14. Iron and Steel.
15. Shipbuilding.
16. Machine Shop Work.
17. Foreign Trade.
18. Dante.
19. Master Builders of To-day.
20. Teaching.
21. Twenty Good Books for Parents.
22. Agriculture and Country Life.

Among the readers enrolled in these courses are chemists, farmers, teachers, librarians, lawyers, doctors, housewives, clerks, stenographers, etc. The total number enrolled in all reading courses is 15,578.

During the past year three new courses have been prepared and issued, namely: Teaching, Twenty Good Books for Parents, and Agriculture and Country Life. The assistance of Prof. T. N. Carver, of Harvard University, and Prof. C. E. Ladd, of Cornell University, was secured in the preparation of the reading course on agriculture and country life.

The demand for information regarding the organization and material for conducting parent-teacher associations has been continuous since this work was established. During the past year 469 organizations have been furnished with some kind of information.

In several States, parents in parent-teacher associations have formed reading circles to read the courses under the guidance of the bureau.

During the past two years the bureau has secured the cooperation of State superintendents of education and extension divisions in sixteen State universities and colleges in carrying on the work of the reading courses. Special collaborators have been appointed in each of the following States: Arizona, Arkansas, Colorado, Indiana, Iowa, Kentucky, Louisiana, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Utah, Virginia, Washington, and Wisconsin.

For some years past the director of home education has been closely associated with several national educational organizations and movements, serving upon various committees, and has secured the cooperation of others in the conduct of this work. Among them are some whose active cooperation has given decided emphasis to the work: the National Congress of Mothers and Parent-Teacher Associations, the International Kindergarten Association, the National University Extension Association, and the National Education Association.

Newspapers and periodicals throughout the country have cooperated in this work. State libraries especially in the following States have given their cooperation: Virginia, North Carolina, Oregon, Illinois, and Oklahoma. State library commissions have been particularly active in the work.

Conferences.—A conference of special collaborators and librarians called by the Commissioner of Education, of which the director of home education was general chairman, was held in Lexington, Ky., in cooperation with the National University Extension Association, at which representatives from 25 States and the District of Columbia were present. A report of this conference has been prepared by the director of home education and submitted for printing.

During the past year 11,125 letters have been received; 83,304 copies of reading courses have been distributed, an increase over last year of about 30,000; 5,145 lists of courses and 1,095 bulletins have been distributed; 1,143 new readers have been enrolled and 72 readers have received certificates for completing courses. Publicity articles have been sent to 416 newspapers and periodicals throughout the country. The greatest number of requests for material furnished by this division has come from Maryland, Pennsylvania, Massachusetts, New York, Illinois, and California.

DIVISION OF MAILS AND FILES.

During the year there were received at the bureau 128,100 letters, 34,013 library publications, and 74,580 statistical reports of various kinds. This does not take into account any of the mail matter received by special agents, special collaborators, and bureau offices outside of Washington.

An aggregate of 764,942 sheets of mimeograph material were distributed from the mailing room of the bureau. This consisted largely of circulars of information, blanks for office records, questionnaires relating to investigations, bibliographies on educational subjects, articles on educational topics for publication in newspapers, announcements of conferences called by the commissioner, home reading courses, and form letters used in answering certain kinds of correspondence.

THE ALASKA DIVISION.

In addition to maintaining schools for the children belonging to the aboriginal races of Alaska, the bureau has continued its endeavors in behalf of the entire native communities by extending medical relief, by maintaining sanitary methods of living, by fostering the commercial enterprises of the natives, by promoting the reindeer industry, and by relieving destitution.

During the year the field force in Alaska included 5 superintendents, 144 teachers, 8 physicians, 14 nurses, 5 nurses in training, 16 hospital attendants, and 7 herders in charge of reindeer belonging to the Government. Seventy schools were in operation with an enrollment of approximately 4,000. Orphanages were maintained at Kakanak and Tyonek for the care of children left destitute by the epidemic of influenza which prevailed in these regions.

The work extends throughout the Territory from the southernmost boundary to the northernmost cape. The majority of the vil-

lages in which the work is located are practically inaccessible during eight months of the year. The larger settlements have been reached, but there yet remain certain regions, especially difficult of access, into which the work has not been extended. Two of these regions were reached during the summer of 1921.

In the great delta between the mouths of the Yukon and Kuskokwim Rivers—a country of marshes and lakes—there are hundreds of Eskimos living in abject squalor. During July a teacher and his wife were sent into this region with the materials for the erection of a school building, the equipment necessary for opening a school, and all the supplies needed for a year. Before the coming of winter precluded the possibility of outdoor activities, the teacher erected the building in which he and his wife must live and to which they must attract the primitive people of the region for instruction in everything pertaining to a higher plane of living. Teachers were also sent to Sleetmute, a primitive village on the upper waters of the Kuskokwim River.

School buildings were also erected at Noorvik, in Arctic Alaska, to replace a small log school building erected by the Eskimos themselves; and on St. Lawrence Island, in Bering Sea, where the school house erected by the carpenter of the U. S. S. *Bear*, with the assistance of the Eskimos, in 1891, had become inadequate; and at Eek, an Eskimo village in western Alaska, the portable building which had been sent to that place having become too small to accommodate the school. It was necessary to send from Seattle to their remote destinations all of the materials for use in constructing these buildings.

During the year the bureau maintained hospitals at Juneau, Kananak, Akiak, Nulato, and Noorvik. As heretofore, teachers in settlements where the services of a physician or nurse were not available were supplied with medicines for use in relieving minor ailments.

Reindeer herds are now distributed among the principal native settlements from Point Barrow to the Alaska Peninsula. The annual reports from the more remote herds have not yet been received. It is estimated that if there has been the usual 20 per cent increase there should be in Alaska approximately 259,000 reindeer, two-thirds of which belong to the natives and one-third to the Government, to white men, and to Lapps.

There have been two notable extensions of the reindeer service during the year. On the untimbered slopes of the region tributary to the Alaska Railroad there is unlimited pasturage for reindeer. In order to establish the reindeer industry in this region, during the past winter a herd of 1,352 reindeer was driven by herders in the employ of the bureau approximately 1,000 miles from a point on the Bering Sea coast to grazing grounds in the vicinity of the railroad. Hitherto the exportation of reindeer meat has been confined to shipments from the Nome region to Seattle only during the short season of open navigation in midsummer. The Alaska Railroad will provide unlimited means of transportation for reindeer meat and hides from the interior to the coast at any time of the year.

In the autumn of 1921 the Coast Guard cutter *Unalga* transported for the Bureau of Education a herd of 54 reindeer from the Alaska Peninsula to Kodiak Island. The western half of Kodiak Island is untimbered and abounds in grazing lands on which great

herds of reindeer can be supported. Through its system of distribution of reindeer, the bureau will provide the natives of Kodiak Island with a source of food and establish a future industry for the island from whose ice-free harbors reindeer meat and hides can be readily exported.

The magnitude and value of the reindeer industry resulted in 1920 in the making by Congress of an appropriation to enable the Bureau of Biological Survey, Department of Agriculture, in cooperation with the Bureau of Education, to make investigations, experiments, and demonstrations for the improvement of the reindeer industry in Alaska. The distribution of reindeer among the natives and the use of the enterprise as the form of industrial education best adapted to the races inhabiting the untimbered regions of Alaska remains under the supervision of the Bureau of Education.

With few exceptions, the native villages in Alaska in which the Bureau of Education's work is carried on are not on the routes of steamers which visit the larger settlements. Transportation of appointees and supplies to the remoter places has been secured only with difficulty and by the payment of heavy charges to small trading schooners going to these regions at infrequent and irregular intervals. This is a precarious, inadequate, and expensive procedure.

In compliance with the request for a vessel suitable for use by the Bureau of Education in its Alaskan work, the Navy Department transferred to the Department of the Interior the U. S. S. *Bower*, a wooden vessel with a carrying capacity of 500 tons and admirably adapted for the purpose contemplated. Funds to cover the expenses of installing an engine and repairing the vessel were provided in the Interior Department appropriation act, approved May 24, 1922.

By means of the *Bower*, the Alaska division will be able to make its own plans for the economical transportation from Seattle of its appointees and of supplies for its schools, hospitals, and reindeer stations. On its southward voyage it can bring out teachers whose terms of service have expired, and carry for Eskimo herders reindeer meat which they wish to sell in the States. It can carry timber from forested regions to the timberless sections. It can distribute coal among the various settlements. It can be used as a school of navigation and seamanship for young native men.

ACTIVITIES OF THE COMMISSIONER.

During the year the Commissioner of Education traveled approximately 75,000 miles; spent 196 days in the field, including Sundays; conducted six national educational conferences; assisted in eight educational campaigns and conferences; addressed 17 national educational associations, 4 regional associations, and 28 State educational associations; visited officially 18 State departments of education, conferred with the chief educational officers of nine other States; addressed 26 institutions of higher learning, 35 business organizations (chambers of commerce, Rotary, Kiwanis, Lion's and other clubs); made a total of 252 addresses, before audiences aggregating 120,000. (Vide figure 4.)

He attended meetings of the Federal Board for Vocational Education, and of the Federal Board for Maternity and Infant Hygiene, of which boards he is a member; also served as chairman of the highway

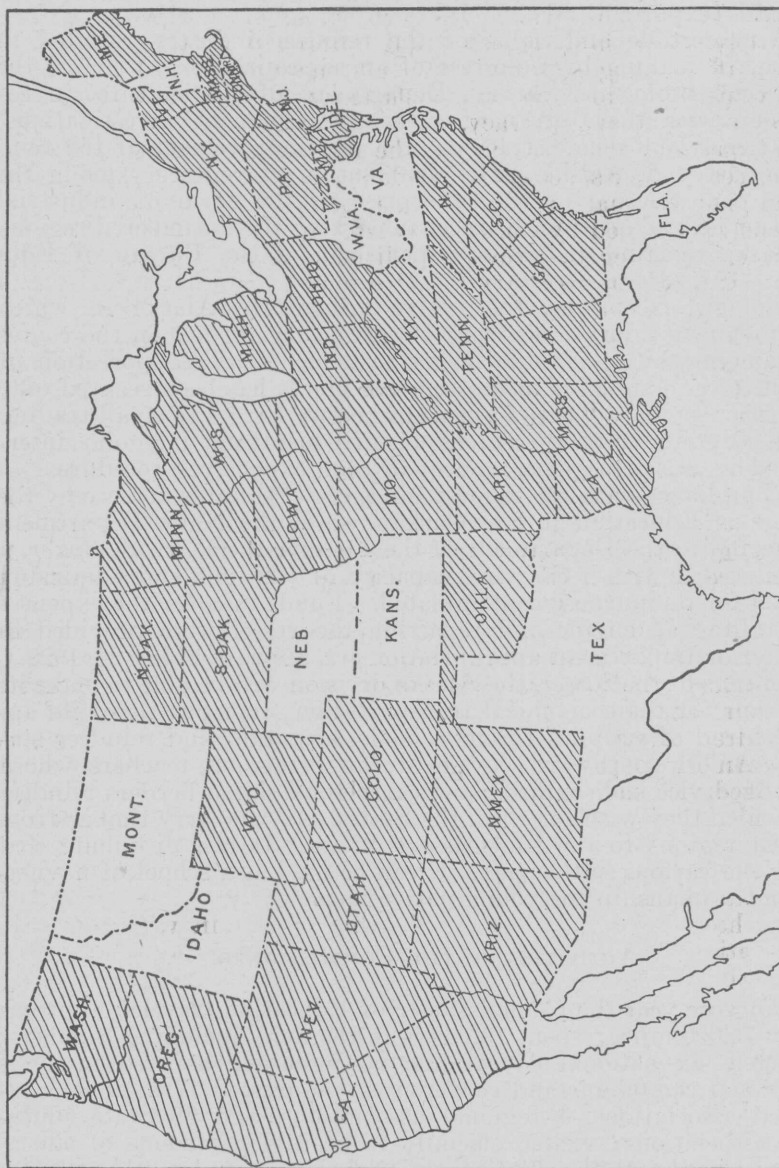


FIGURE 4.—Map showing the States in which the Commissioner of Education personally has made educational addresses, visited schools, conferred with educational officials, or performed some other kind of field service during the fiscal year 1921-22. During the year the Commissioner traveled upwards of 75,000 miles.

and highway transport committee. He wrote and published 22 articles, and held more than 600 conferences in his office in Washington with those seeking advice and assistance in educational matters.

RECOMMENDATIONS.

Office rooms.—The quarters in the Pension Building now occupied by the Bureau of Education are not at all suited to the work of the bureau. The staff in Washington consists of 87 employees, divided necessarily into comparatively small units, and a large proportion of the staff is engaged on important administrative and highly technical work. To do such work efficiently requires a considerable amount of quiet and privacy, such as can not be secured in the present quarters where nearly all the rooms contain more than 900 square feet of floor space each. Under present conditions it is necessary to place too many specialists in a room, where some of them are frequently disturbed by conferences held by other specialists. Furthermore, in order to provide additional space for the Pension Bureau, it has been necessary to place temporarily one division and one section of this bureau in the court of the Pension Building. The court is not a satisfactory place for employees, especially in cold weather, and I earnestly recommend that steps be taken to provide immediately more suitable quarters for the bureau.

Appropriations.—There is urgent need of much larger appropriations for the work of the bureau, notwithstanding the present program of economy in governmental expenditures. The Federal Government has a responsibility for leadership in education which it can not shirk without risk of peril to our democratic institutions. Increasing popular interest in education, and realization of the significance of universal education in a democracy, leave no room for doubt as to the need.

We have 48 systems of education, each of the sovereign States maintaining its own program, adopting its own methods of organization, administration, and instruction, and determining for itself the amount and character of instruction which shall be provided for the children of its citizens. This is as it should be, for the genius of the American people will probably never accept the idea of a centralized national system of public schools.

However, the most casual investigation shows that some of the States are more successful than others in solving the problems of public education. While some of the States, through years of experience and through the consecutive efforts of generations of trained leaders, have accomplished notable achievements in various phases of educational theory and practice, we find certain other States seeking the answers to many of the same questions, laboriously and at great expense exploring ground that has already been carefully charted.

Much of the arduous labor and costly duplication of experimentation has undoubtedly been saved in the past by the ministrations of the Federal Bureau of Education. As an unbiased, disinterested service agency it has made a unique place for itself. To the limit of its meager resources it has made available to all the States the experiences of the most progressive and the achievements of the most highly endowed. It has supplied to all sections of the country, as no other agency could, the stimulus that comes from knowledge of what others are doing, and through the natural desire to emulate the best and to appropriate the experience of others it has pointed the way to national progress in education.

This country faces a crisis in education that is as acute as that discernible in any other phase of our national life. There never was a time of greater need of informed leadership. The needs in respect to the assimilation of the foreign born and foreign-language speaking, the removal of adult illiteracy, the adjustment of gross inequalities of opportunity for education, and the positive inculcation of proper ideals concerning our form of Government and of respect for constituted authority are becoming more and more evident. The future of our experiment in democracy will be determined largely by what we do or fail to do in the matter of public education. Some even affirm that the success of our cherished institutions hangs in the balance, while we debate whether the percentage of illiteracy and ignorance among our people is 23.5 or 25.

Substantial increase in the support of the Bureau of Education would still be but a conservative investment in the light of the service to the whole people thus made possible.

The Federal Government has expended large sums upon the investigation and remedying of diseases of plants and animals, analyzing the soil, and many other things which have greatly promoted the material welfare of the Nation. Certainly it would be wise to expend something more than the infinitesimal sum the Federal Government now appropriates for the mental and physical welfare of the boys and girls of the Republic.

The limitation of armaments, made possible by international agreements at the Washington conference, should relieve the Federal Government of expenditures which have been either negative or destructive and enable it to promote constructively, in a larger measure, the public welfare.

If burdens of debt already incurred prevent immediate increases in expenditures for education and other welfare interests of our people, would it not be wise and timely to consider at this time a more effective plan of organization of education and welfare in the Federal Government?

President Harding has expressed himself as favoring such a reorganization, and such a plan has possibly been under consideration. A competent authority has stated¹ that "there are now 30 or more different parts of the Government service doing educational work." Each of these agencies has a separate appropriation. President Harding has well pointed out that such an arrangement "magnifies cost and fritters energy."

Certainly some of these activities may be coordinated on some plan generally acceptable which will save money and render a larger service of which the Nation stands in dire need at this time. The requirements outlined in my last report are all as urgent as they were last year, and in some instances have intensified.

Respectfully submitted.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

¹ H. R. Report No. 1201, 66th Cong., 3d sess., p. 7.